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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/615,157	07/07/2003	Olivier Pelletier	10022/579	8242
28164	7590	12/13/2007	EXAMINER	
ACCENTURE CHICAGO 28164			ANDERSON, FOLASHADE	
BRINKS HOFER GILSON & LIONE				
P O BOX 10395			ART UNIT	PAPER NUMBER
CHICAGO, IL 60610			3623	
			MAIL DATE	DELIVERY MODE
			12/13/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	10/615,157	PELLETIER, OLIVIER
	Examiner Folashade Anderson	Art Unit 3623

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 07 July 2003.
- 2a) This action is FINAL.                            2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-17 is/are pending in the application.
  - 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-17 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.
 

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All    b) Some \*    c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date See Continuation Sheet.
- 4) Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) Notice of Informal Patent Application
- 6) Other: \_\_\_\_\_.

Continuation of Attachment(s) 3). Information Disclosure Statement(s) (PTO/SB/08), Paper No(s)/Mail Date  
06/23/05, 02/07/05, and 11/24/03.

**37 CFR § 1.105 – Requirement for Information**

Applicant and the assignee of this application are required under 37 CFR 1.105 to provide the following information that the examiner has determined is reasonably necessary to the examination of this application.

In response to this requirement, please provide answers to each of the following interrogatories eliciting factual information:

The instant application includes several equations as represented in claims 2, 5 and 7. Information is requested regarding said equations. Are the claimed equations based upon the work of others, or simply a derived product of the Applicant's invention? Specifically, Applicant is requested to clarify the source and/or derivation of the equations claimed.

The information is required to identify products and services embodying the disclosed subject matter of non-collaborative processing of database information based on elemental make up of the product as claimed in claims 2, 5 and 7 and identify the properties of similar products and services found in the prior art.

The information is required to extend the domain of search for prior art. Limited amounts of art related to the claimed subject matter are available within the Office, and are generally found in class 705 and subclass 10, which describes market analysis, demand forecasting or surveying. A broader range of art to search is necessary to establish the level of knowledge of those of ordinary skill in the claimed subject matter art of non-collaborative processing of database information based on elemental make up of the product.

In response to this requirement, please provide copies of each publication which any of the applicants authored or co-authored and which describe the disclosed subject matter of non-collaborative processing of database information based on elemental make up of the product.

In responding to those requirements that require copies of documents, where the document is a bound text or a single article over 50 pages, the requirement may be met by providing copies of those pages that provide the particular subject matter indicated in the requirement, or where such subject matter is not indicated, the subject matter found in applicant's disclosure.

The fee and certification requirements of 37 CFR 1.97 are waived for those documents submitted in reply to this requirement. This waiver extends only to those documents within the scope of this requirement under 37 CFR 1.105 that are included in the applicant's first complete communication responding to this requirement. Any supplemental replies subsequent to the first communication responding to this requirement and any information disclosures beyond the scope of this requirement under 37 CFR 1.105 are subject to the fee and certification requirements of 37 CFR 1.97.

The applicant is reminded that the reply to this requirement must be made with candor and good faith under 37 CFR 1.56. Where the applicant does not have or cannot readily obtain an item of required information, a statement that the item is unknown or cannot be readily obtained may be accepted as a complete reply to the requirement for that item.

This requirement is an attachment of the enclosed Office action. A complete reply to the enclosed Office action must include a complete reply to this requirement. The time period for reply to this requirement coincides with the time period for reply to the enclosed Office action which is 3 months.

## **DETAILED ACTION**

1. This is the first non-final office action in response to Applicant's submission filed on July 7, 2003. Currently, claims 1- 17 are pending.

### ***Information Disclosure Statement***

2. The information disclosure statements (IDS) submitted on 11/24/2003, 02/07/2005 and 06/23/2005 were considered in the prosecution of the claims in the instant application.

### ***Title***

3. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested: A System and Method for Using a User Determined Scent or Taste Profile to Present a Predicted Adaptive Scent or Taste to a User

### ***Claim Objections***

4. **Claims 2, 5 and 7** are objected to because they are dependent upon a rejected base claim, but may be allowable:

- if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
- if the documentation provided under 37 CFR § 1.105 support the calculations are a product of the applicants own work.
- if all rejections made under 35 USC § 112 are properly addressed

**Claim 6** is objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim should refer to other claims in the alternative only. See MPEP § 608.01(n). Accordingly, the claim 6 has not been further treated on the merits. For propose of examination it is assumed that Applicant intended to claim: A method for selecting a product adapted to a user on the basis of its smell or taste, using a user profile determined according to any one method of claims 1, 2 or 4 comprising:

**Claim 15** is objected to because of the following informalities: ...configured to select a *the* subset of... For purpose examination it is assumed that the use of articles “a” and “the” is a typo and the Applicant intends to use “a”. Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. **Claims 2 and 5-7** are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential steps, such omission amounting to a gap between the steps. See MPEP § 2172.01.

In regards to **claim 2, 5 and 7** it is clear that the ratings are inputted by the user of the system. However it is not apparent how the ranks are stored, generated or determined in the method/system.

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1, 3, 6, 8-15 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Juergens (US Patent 5,200,909) in view of Hillier et al (Introduction to Operations Research, published 01/1995).

In regards to **claim 1**, Juergens teaches

- storing for each of a set of products chosen among products for which a database (fig. 10A) includes smell or taste prints constituted by a set of measurements given by smell or taste electronic sensors (col. 4, lines 52-61; official notice is taken that smell and electronic sensors were old and well known tools used in laboratory measurements), a satisfaction note rating (SN) given by the user (col. 10, lines 56-66 where preference score is similar to the satisfaction note rating); and
- automatically calculating weighting coefficients constituting said profile and respectively affected to said sensors measurements, by successive approximation of sets of weighting coefficients (col. 11, lines 44-68 and col. 12, lines 1-5).

Juergens does not expressly teach

- minimizing the sum of the quadratic errors over the set of satisfaction notes.

Hillier teaches minimizing the sum of the quadratic errors over the set of satisfaction notes (pgs 500-502 and 588-590) in an analogous art of operations research for the purpose of finding the best solution for the problem under consideration (pg. 3).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to use the teachings of Hillier, to minimize the sum of the quadratic errors, in the invention of Juergens because it would have allowed for a purer picture of the preferred user defined product.

In regards to **claim 3 and 17** Juergens teaches preference scores are on a scale of 0-10 (col. 4, lines 61-62) and satisfaction note rating (col. 9, lines 42-51). Juergens does not expressly teach that a satisfaction note rating is a value from 1 to 5 (col. 9, lines 42-51).

Official notice is taken it would have been obvious to one of ordinary skill in the art at the time the invention was made that the scale or weighting could have been in the range of any range including that of 1 to 5 or 1 to 3. Regardless of the magnitude of the scale or weighting factor the process steps are the same therefore the description as claimed is not distinguishable over the prior art.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use a range of 1 to 5 or 1 to 3 in the invention of Juergens to focus the user by reducing the number of preference options.

In regards to **claim 6 and 13** Juergens teaches

- estimating a rating for products for which the database includes the scent or taste prints, by applying the weighting coefficients to the scent or taste prints (col. 5-7); and
- selecting among the products, a subset on the basis of the estimated rating (col. 12, lines 59-64).

In regards to **claim 8** Juergens teaches which the product of said subset are selected for having an estimated rating close to the highest or lowest rating within a predetermined margin (col. 9, line 42-55).

In regards to **claim 9 and 15**, Juergens teaches which a predetermined number of products having the highest or lowest estimated rating constitutes said subset (col. 12, lines 19-25). Official notice is taken that one of ordinary skill in the art at the time the invention was made could have inversely added a subroutine to figure the lowest or least a likely to inform the user of the product which they are least likely to enjoy.

It would have been obvious to one of ordinary skill in the art at the time the invention was made include a subset of the estimate the lowest estimated rating in the invention of Juergens because it would serve as a list of least likely enjoyable products.

In regards to **claim 10 and 14**, Juergens teaches a method applied to perfumes selection, (col. 14, lines, 8-13).

In regards to **claim 11**, Juergens teaches a method applied to wines selection (col. 14, lines, 8-13).

In regards to **claim 12**, Juergens teaches:

- a database containing smell or taste prints of products constituted by a set of measurements given by smell or taste electronic sensors (fig. 10A);
- a memory element for storing a user rating of each of a set of products chosen among the products contained in said database ( col.12, line 65-68 and col. 13, lines 1-5);
- a calculator of weighting coefficients constituting said profile and respectively affected to said sensors, by successive approximation of sets of weighting coefficients ((col. 11, lines 44-68 and col.12, lines 1-5).

Juergens does not expressly teaches

- minimizing the sum of the quadratic errors over the set of rating.

Hillier teaches minimizing the sum of the quadratic errors over the set of satisfaction notes (pgs 500-502 and 588-590) in an analogous art of operations research for the purpose of finding the best solution for the problem under consideration (pg. 3).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to use the teachings of Hillier, to minimize the sum of the quadratic errors, in the invention of Juergens because it would have allowed for a purer picture of the preferred user defined product

8. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Juergens (US Patent 5,200,909) in view of Hillier et al (Introduction to Operations Research,

published 01/1995) as applied to claim 1 and further in view of Glaser et al (US Patent 7,003, 515).

In regards to **claim 4** Juergens dose teach modifying the rating scores, base on a particular wine (col. 10, lines 59-68 and col. 11, lines 1-7). However Juergens does not expressly teach receiving from the user an additional rating for an additional product selected, on the basis of the already given ratings, as being the product for which the notation of the user will be the most relevant for the user profile.

Glaser teaches receiving from the user an additional rating for an additional product selected, on the basis of the already given ratings, as being the product for which the notation of the user will be the most relevant for the user profile (col. 4, lines 41-58), in the analogous art of creating music play list.

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to use the teachings of Glaser, receiving from the user an additional rating for an additional product selected, on the basis of the already given ratings, as being the product for which the notation of the user will be the most relevant for the user profile, in the invention of Juergens because it allows consumers that have difficulty in finding product they like to find products based on their own taste (Glaser col. 4, lines 52-56).

9. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Juergens (US Patent 5,200,909) in view of Hillier et al (Introduction to Operations Research, published 01/1995) as applied to claim 12 above and further in view of Yamafuji et al (US Patent 5,302,262).

In regards to **claim 16**, Juergens teaches wine samples being sent to laboratory for evaluation (col. 4, lines 23-24). Juergens does not expressly teach comprising a smell or taste electronic sensor.

Yamafuji teaches comprising a smell or taste electronic sensor (col. 3, lines 24-27) in an analogous art of taste sensing for the purpose of detecting taste of a plurality of similar samples (col. 3, lines 28-31).

It would have been obvious to a person of ordinary skill in the art at the time of invention was made to use the teachings of Yamafuji, comprising a smell or taste electronic sensor, in the invention of Juergens to detect the taste of samples (col.3, lines 62-64).

### ***Conclusion***

10. This Office action has an attached requirement for information under 37 C.F.R. § 1.105. A complete response to this Office action must include a complete response to the attached requirement for information. The time period for reply to the attached requirement coincides with the time period for reply to this Office action.

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Jacobson (Artificial Tongue, published 03/22/1999) teaches the technology used in portable liquid sensing devices.
- Newswire (Savage Beast Technologies, published 11/13/2000) teaches recommend play list based on the attributes of the music
- Sunshine (US Patent 6,606,566 B1) teaches comparing an unknown sensory substance to an electronic library of known substance for identification.
- Bellenson, et al (International Publication 01/007093 A1) teaches electronically recording, analysis, editing and playback of scents

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Folashade Anderson whose telephone number is (571) 270-3331. The examiner can normally be reached on Monday through Thursday 8:00 am to 5:00 pm EST.

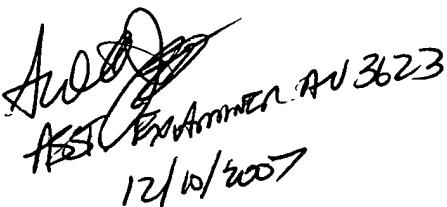
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tariq R. Hafiz can be reached on (571) 272-6729. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Handwritten signature of Tariq R. Hafiz in black ink, appearing to read "Tariq R. Hafiz".

12/10/2007

FAOA

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